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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,697	01/29/2002	Stefan Keller-Tuberg	135924	5932

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EXAMINER

NANO, SARGON N

ART UNIT PAPER NUMBER

2157

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,697

Applicant(s)

KELLER-TUBERG, STEFAN

Examiner

Sargon N. Nano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. This office action is responsive to amendment filed on Dec. 29, 2005. Claims 1 – 34 are pending examination.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 –34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumar et al. U.S. Patent No. 6269080 .

Kumar teaches a method for multicast file distribution and synchronization in a data network (see abstract).

As to claim 1, Kumar teaches a method for facilitating acknowledgement of a request for altering a multicast group membership status, comprising:

receiving an Internet Group Management Protocol (IGMP) Membership Report message designating a request for altering a present membership status with respect to designated multicast information (see col. 6 line 7 - 44, Kumar discloses sources sending multicast address and receivers join multicast group to receive data) ;

determining a membership action associated with the IGMP Membership Report message ( see col.17 line 58 – col. 18 line 12 , Kumar discloses the status of clients during multicast distribution);

preparing a membership acknowledge message in response to determining the membership action, wherein the membership acknowledgment message designates a resulting membership status associated with the request for altering the present membership status; and transmitting the membership acknowledge message for reception by a requesting system (see col. 1 lines 34 – 47 and col. 6 lines 7 - 44 Kumar discloses a new member being added to the group and multiple handlers being created to handle reliable join in or sign off request).

As to claim 2, Kumar teaches the method of claim 1 wherein:

determining the membership action includes confirming an inability to implement the request for altering the present membership status; and preparing the membership acknowledge message includes preparing an IGMP negative acknowledge message (see col. 1 lines 66- col3 lines 38).

As to claim 3, Kumar teaches the method of claim 2 wherein preparing the IGMP negative acknowledge message includes: specifying an acknowledgement indicator in a message type field of an IGMP message; specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message; and specifying a negative acknowledgement indicator in an acknowledgment type field of the IGMP message, the negative acknowledgement

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indicator designates the inability to implement the request for altering the present membership status(see col. 1 lines 66- col3 lines 38).

As to claim 4, Kumar teaches the method of claim 3 wherein: receiving the IGMP Membership Report message includes receiving an IGMP Membership Report message; and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information (see col.6 lines 7 – 22).

As to claim 5, Kumar teaches the method of claim 4 wherein preparing the negative acknowledgment message includes specifying supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38).

As to claim 6, Kumar teaches the method of claim 3 wherein: receiving the IGMP Membership Report message includes receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col.5 line 55 – col. 6 line 22).

As to claim 7, Kumar teaches the method of claim 6 wherein preparing the negative acknowledgment message includes specifying supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38).

As to claim 8, Kumar teaches the method of claim 1 wherein:

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determining the membership action includes confirming an ability to implement the request for altering the present membership status(see col.1 line 66 – col. 3 lines 38).

; and preparing the membership acknowledge message includes preparing an affirmative acknowledge message (see col.1 line 34 – 47 and col. 6 lines 7 - 44).

As to claim 9, Kumar teaches the method of claim 8 wherein preparing the affirmative acknowledge message includes:

specifying an acknowledgement indicator in a message type field of an IGMP message (see col.1 line 34 – 47 and col. 6 lines 7 - 44);

specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message(see col.1 line 34 – 47 and col. 6 lines 7 - 44); and

specifying an affirmative acknowledgement indicator in an acknowledgment type field of the IGMP message, the affirmative acknowledgement indicator designates the ability to implement the request for altering the present membership status (see col.1 line 34 – 47 and col. 6 lines 7 - 44).

As to claim 10, Kumar teaches the method of claim 9 wherein: receiving the IGMP Membership Report message includes receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col. 5 line 55 – col.6 line 44).

As to claim 11, Kumar teaches the method of claim 9 wherein: receiving the IGMP Membership Report message includes receiving an IGMP Membership Report message (see col. 6 lines 7 – 22); and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information (see col. 17 line 60 – col. 8 line 13).

As to claim 12, Kumar teaches a method for facilitating acknowledgment of a request for altering a multicast group membership status, comprising:

receiving an Internet Group Management Protocol (IGMP) Membership Report message, wherein the IGMP Membership Report message is transmitted from a requesting system and requests membership in a particular multicast group for receiving designated multicast information (see col. 6 lines 7 – 22);

confirming an ability to implement membership of the requesting system in the particular multicast group (see col. 17 lines 60 – col. 18 line 12);

preparing a first affirmative acknowledge message after confirming the ability to implement membership of the requesting system in the particular multi cast group, wherein preparing the first affirmative acknowledge message includes:

specifying acknowledge message in a type field of a first IGMP message (see col. 1 lines 66 – col. 3 lines 38);

specifying an identifier of the particular multicast group in a multicast group identifier field of the first IGMP message; and specifying an affirmative acknowledgement in an acknowledgment type field of the first IGMP message, the affirmative acknowledgement designating the ability to implement membership of the

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requesting system in the particular multicast group(see col. 1 lines 34 – 47 and col. 6 lines 7 - 44);

transmitting the first affirmative acknowledge message for reception by the requesting system(see col. 1 lines 34 – 47 and col.6 lines 7 - 44);

receiving an IGMP Leave Group message from the requesting system after transmitting the first affirmative acknowledge message, wherein the IGMP Leave Group message requests removal of the requesting system from the particular multicast group(see col. 1 lines 34 – 47 and col.6 lines 7 - 44);

confirming an ability to implement removal of the requesting system from the particular multicast group(see col. 1 lines 34 – 47 and col.6 lines 7 - 44); and

preparing a second affirmative acknowledge message after confirming the ability to implement removal of the requesting system from the particular multicast group, wherein preparing the second affirmative acknowledge message includes:

specifying acknowledge message in a type field of a first IGMP message;  
specifying an identifier of the particular multicast group in a multicast group identifier field of the first IGMP message(see col. 1 lines 34 – 47 and col.6 lines 7 - 44); and  
specifying an affirmative acknowledgement in an acknowledgment type field of the first IGMP message, the affirmative acknowledgement designating the ability to implement removal of the requesting system from the particular multicast group(see col. 5 line 55 – col. 6 line 44).



As to claim 13, Kumar teaches a data processor program product for facilitating acknowledgment of a request for altering a multicast group membership status, comprising:

a data processor program processable by a data processor (see fig. 10);

an apparatus from which the data processor program is accessible by the data processor(see fig. 10); and the data processor program being capable of enabling the data processor to facilitate :

receiving an Internet Group Management Protocol (IGMP) Membership Report message designating a request for altering a present membership status with respect to designated multicast information (see col. 6 line 7 – 22);

determining a membership action associated with the IGMP Membership Report message; preparing a membership acknowledge message in response to determining the membership action, wherein the membership acknowledgment message designates a resulting membership status associated with the request for altering the present membership status( see col.17 line 60 – col. 18 line 12);

and transmitting the membership acknowledge message for reception by a requesting system(see col. 1 lines 34 – 47 and col. 6 lines 7 – 44).

As to claim 14, Kumar teaches the data processor program product of claim 13 wherein enabling the data processor to facilitate:

determining the membership action includes enabling the data processor to facilitate confirming an inability to implement the request for altering the present membership status; and preparing the membership acknowledge message includes

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enabling the data processor to facilitate preparing an IGMP negative acknowledge message(see col. 1 lines 66- col3 lines 38).

As to claim 15, Kumar teaches the data processor program product of claim 14 wherein enabling the data processor to facilitate preparing the IGMP negative acknowledge message includes: enabling the data processor to facilitate specifying an acknowledgement indicator in a message type field of an IGMP message; enabling the data processor to facilitate specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message; and enabling the data processor to facilitate specifying a negative acknowledgement indicator in an acknowledgment type field of the IGMP message, the negative acknowledgement indicator designates the inability to implement the request for altering the present membership status(see col. 1 lines 66- col3 lines 38).

As to claim 16, Kumar teaches the data processor program product of claim 15 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Membership Report message; and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information(see col.6 lines 7 – 22).

As to claim 17, Kumar teaches the data processor program product of claim 16 wherein enabling the data processor to facilitate preparing the negative acknowledgment message includes enabling the data processor to facilitate specifying

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supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38).

As to claim 18, Kumar teaches the data processor program product of claim 15 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col.5 line 55 – col. 6 line 22).

As to claim 19, Kumar teaches the data processor program product of claim 18 wherein enabling the data processor to facilitate preparing the negative acknowledgment message includes enabling the data processor to facilitate specifying supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38).

As to claim 20, Kumar teaches Kumar teaches the data processor program product of claim 13 wherein enabling the data processor to facilitate: determining the membership action includes enabling the data processor to facilitate confirming an ability to implement the request for altering the present membership status; and preparing the membership acknowledge message includes enabling the data processor to facilitate preparing an affirmative acknowledge message (see col.1 line 66 – col. 3 lines 38).

As to claim 21, Kumar teaches the data processor program product of claim 20 wherein enabling the data processor to facilitate preparing the affirmative acknowledge

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message includes: enabling the data processor to facilitate specifying an acknowledgement indicator in a message type field of an IGMP message (see col.1 line 34 – 47 and col. 6 lines 7 - 44); enabling the data processor to facilitate specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message(see col.1 line 34 – 47 and col. 6 lines 7 - 44); and enabling the data processor to facilitate specifying an affirmative acknowledgement indicator in an acknowledgment type field of the IGMP message, the affirmative acknowledgement indicator designates the ability to implement the request for altering the present membership status(see col.1 line 34 – 47 and col. 6 lines 7 - 44).

As to claim 22, Kumar teaches the data processor program product of claim 21 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col. 5 line 55 – col.6 line 44).

As to claim 23, Kumar teaches the data processor program product of claim 21 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Membership Report message; and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information(see col. 17 line 60 – col.8 line 13).

As to claim 24, Kumar teaches a system for facilitating acknowledgment of a request for altering a multicast group membership status, comprising:

a multicast-capable system including a data processor; and a data processor program accessible by the data processor of the multicast-capable system; the data processor program being capable of enabling the data processor of the multicast-capable system to facilitate:

receiving an Internet Group Management Protocol (IGMP) Membership Report message designating a request for altering a present membership status with respect to designated multi cast information; determining a membership action associated with the IGMP Membership Report message;

preparing a membership acknowledge message in response to determining the membership action, wherein the membership acknowledgment message designates a resulting membership status associated with the request for altering the present member ship status; and transmitting the membership acknowledge message for reception by a requesting system.

As to claim 25, Kumar teaches the system of claim 24 wherein enabling the data processor to facilitate: determining the membership action includes enabling the data processor to facilitate confirming an inability to implement the request for altering the present membership status; and preparing the membership acknowledge message includes enabling the data processor to facilitate preparing an IGMP negative acknowledge message (see col. 1 lines 66- col3 lines 38).

As to claim 26, Kumar teaches the system of claim 25 wherein enabling the data processor to facilitate preparing the IGMP negative acknowledge message includes: enabling the data processor to facilitate specifying an acknowledgement indicator in a message type field of an IGMP message; enabling the data processor to facilitate specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message; and enabling the data processor to facilitate specifying a negative acknowledgment indicator in an acknowledgment type field of the IGMP message, the negative acknowledgement indicator designates the inability to implement the request for altering the present membership status(see col. 1 lines 66- col3 lines 38).

As to claim 27, Kumar teaches the system of claim 26 wherein:

enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Membership Report message; and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information(see col.6 lines 7 – 22).

As to claim 28, Kumar teaches the system of claim 27 wherein enabling the data processor to facilitate preparing the negative acknowledgment message includes enabling the data processor to facilitate specifying supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38).

As to claim 29, Kumar teaches the system of claim 26 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col.5 line 55 – col. 6 line 22).

As to claim 30, Kumar teaches the system of claim 29 wherein enabling the data processor to facilitate preparing the negative acknowledgment message includes enabling the data processor to facilitate specifying supplemental membership action information in an additional cause information field of the IGMP message (see col.1 line 66 – col. 3 lines 38). As to claim 31, Kumar teaches the system of claim 24 wherein enabling the data processor to facilitate: determining the membership action includes enabling the data processor to facilitate confirming an ability to implement the request for altering the present membership status; and preparing the membership acknowledge message includes enabling the data processor to facilitate preparing an affirmative acknowledge message (see col.1 line 66 – col. 3 lines 38).

As to claim 32, Kumar teaches the system of claim 31 wherein enabling the data processor to facilitate preparing the affirmative acknowledge message includes: enabling the data processor to facilitate specifying an acknowledgement indicator in a message type field of an IGMP message (see col.1 line 34 – 47 and col. 6 lines 7 - 44);

enabling the data processor to facilitate specifying a multicast group identifier associated with the particular multicast group in a multicast group identifier field of the IGMP message(see col.1 line 34 – 47 and col. 6 lines 7 - 44); and

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enabling the data processor to facilitate specifying an affirmative acknowledgement indicator in an acknowledgment type field of the IGMP message, the affirmative acknowledgement indicator designates the ability to implement the request for altering the present membership status(see col.1 line 34 – 47 and col. 6 lines 7 - 44).

As to claim 33, Kumar teaches the system of claim 32 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Leave Group message; and the IGMP Leave Group message requests removal from a particular multicast group receiving said designated multicast information (see col. 5 line 55 – col.6 line 44).

As to claim 34, Kumar teaches the system of claim 32 wherein: enabling the data processor to facilitate receiving the IGMP Membership Report message includes enabling the data processor to facilitate receiving an IGMP Membership Report message; and the IGMP Membership Report message requests membership in a particular multicast group for receiving said designated multicast information (see col. 17 line 60 – col.8 line 13).

### ***Response to Arguments***

2. In the remarks applicant argue in substance that A) Kumar does not have a provision for notifying a requesting system when a particular membership request is lost or denied.



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In response to A) Kumar discloses that when a receiver detects an absence of data transmission (request is lost or denied) after joining an IGMP multicast group a request is sent to the server for retransmission of data or file to the receiver (see col. 6 line 64 – col. 7 line 10 and fig.4).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

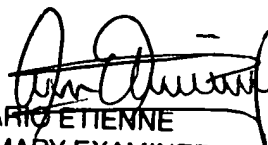
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N. Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano  
Jan. 13, 2005

  
ARIC ETIENNE  
PRIMARY EXAMINER